

## PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

REC'D 02 FEB 2005

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Applicant's or agent's file reference multi-019	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/BR 03/00167	International filing date (day/month/year) 17.11.2003	Priority date (day/month/year) 25.11.2002
International Patent Classification (IPC) or both national classification and IPC E05D11/00		
Applicant MULTIBRAS S.A. ELETRODOMESTICOS et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I  Basis of the opinion
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 28.04.2004	Date of completion of this report 01.02.2005
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Gesell, J Telephone No. +49 89 2399-2712



**INTERNATIONAL PRELIMINARY  
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**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-9 as originally filed

**Claims, Numbers**

1-14 as originally filed

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	3-14
	No: Claims	1,2
Inventive step (IS)	Yes: Claims	4-8
	No: Claims	3,9--14
Industrial applicability (IA)	Yes: Claims	1 -14
	No: Claims	

2. Citations and explanations

**see separate sheet**

ITEM V:

**US-A-4 543 800** (figures, claims) discloses an electric supply system for the door 14 of refrigerators and freezers and other appliances comprising a cabinet (16) to which is articulated an end edge of a door 14 carrying an electronic control means , it comprises a connecting means (32,33, fig. 2,3,4,5) mounted to each region of the cabinet which is foreseen to receive and affix a respective hinge 20 (which in the present case is only a single region) provided with a tubular hinge pin 24; an auxiliary electric wiring connecting the connecting means with an internal electric circuit of the appliance; a duct (21) provided in the door (14) and having an inlet opened to the interior of the door and an outlet opened (at about 26) to the outside of the end edge of the door in a coaxial position in relation to that foreseen for mounting the hinge pin (see fig. 2) of a respective hinge (20), as a function of the opening directions foreseen for the door, a tubular bushing (25) provided at the outlet of the duct 21 receiving and bearing the hinge pin of the hinge ; an electric wiring 22 mounted through the duct 21, from its inlet to its outlet and through the hinge pin of the hinge (fig. 2), in order to have an internal end connected with the electronic control means and an external end electrically coupled to the connecting means 32,33 adjacent to the hinge (20, compare with present claim 1);

wherein further

the connecting means (32,33) is mounted inside a respective housing (fig. 3,4) provided on the face of the cabinet to which the hinge is affixed (compare with present claim 2)

**US-A-4 671 582** (figures, claims) discloses an electric supply system for the door 20 of refrigerators and freezers and other appliances comprising a cabinet 16 to which is articulated an end edge of a door 20 carrying an electronic control means , it comprises a connecting means (90,190, fig. 9,5,13-15) mounted to each region of the cabinet which is foreseen to receive and affix a respective hinge (30 ,which in the present case comprises only several regions) provided with a tubular hinge pin (fig. 8, 62); an auxiliary electric wiring connecting the connecting means with an internal electric circuit of the appliance; a duct (no ref., number, hollow interior of the dor shown in fig. 5) provided in the door 20 and having an inlet opened to the interior of the door and an outlet opened (at about 21) to the outside of the end edge of the door in a coaxial position in relation to that foreseen for mounting the hinge pin (see fig. 5) of a respective hinge , as a function of the opening directions foreseen for the door , a tubular bushing 21 is provided at the outlet of the duct receiving and bearing the hinge pin of the hinge ; an electric wiring 50,52,54,118 is mounted through the duct in

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the door from its inlet to its outlet and through the hinge pin of the hinge (fig. 8), in order to have an internal end connected with the electronic control means and an external end electrically coupled to the connecting means 90,190 adjacent to the hinge (compare with present claim 1).

Said US-A-4 671 582 renders obvious the provision of two electrical connector housings on each side of the cabinet frame (see fig. 13, ref. numbers 90,190, compare with present claim 3), each located close to a respective side of the cabinet and housing a connecting means connected to the auxiliary electric wiring.

A duct for the electrical wires in the door in form of a groove defined in the end edge of the door with which the hinge cooperates, the inlet being defined at the bottom of the median region of the groove presenting widened opposite ends defining a pair of outlets, finds no example in the prior art and makes it easier to change the opening direction of the door (compare with present claim 4).

Claims 9 to 14 relate to usual constructional details.